My submission focuses on two parts of the coal regulatory system and two suggestions for what should be done about them: the Mine Financial Security Program the Selenium limits in the forthcoming federal Coal Mining Effluent Regulations.

My two suggestions are:

- (1) that the committee require the MFSP's asset-to-liability approach to be scrapped and a full security approach, based on the AER's best estimates of clean-up liability, be required for Alberta's coal mines prior to any new mines being considered.
- (2) that the committee endorse the Coal Mining Effluent Regulations and encourage Alberta to reject projects that plan to rely on the grandfathering clause to obtain higher regulatory limits for selenium release.

Alberta's Mine Financial Security Program

One of the Committee's tasks is to identify where coal should be mined in the province. If the MFSP is not replaced with a working system for mine reclamation, the clear answer is nowhere.

The Mine Financial Security Program is meant to obtain security for the clean-up costs of coal mines. The MFSP has been criticized by the Auditor General since 2015, but has yet to be reworked to fix the problems the auditor general identified. A follow up report was issued in 2019, and the Auditor General's report for 2021 found that the department had "made unsatisfactory progress in implementing the recommendation". Alberta's Auditor General neatly summed up the importance of the MFSP:

In the event that a mine operator cannot fulfill its reclamation obligations, and no other private operator assumes the liability, the province may have to pay a potentially substantial cost for this work to be completed. Thus, a robust and responsive system to calculate and collect security from mine operators is essential.⁴

¹ Auditor General of Alberta, Environment and Parks and the Alberta Energy Regulator – Systems to Ensure Sufficient Financial Security for Land Disturbances from Mining, July 2015. www.oag.ab.ca/wpcontent/uploads/2020/05/EP PA July2015 AER Systems Ensure Fin Security Land Disturb.pdf

² Auditor General of Alberta, *Alberta Energy Regulator – Systems to Ensure Sufficient Financial Security for Land Disturbances from Mining Followup*. November 2019. www.oag.ab.ca/wp-content/uploads/2020/05/AER Land Disturbances from Mining Nov2019 3TU2sqU.pdf

³ Auditor General of Alberta, *Report of the Auditor General*, June 2021, page 29. www.oag.ab.ca/wp-content/uploads/2021/06/oag-june-2021-report.pdf

⁴ Auditor General of Alberta, *Environment and Parks and the Alberta Energy Regulator – Systems to Ensure Sufficient Financial Security for Land Disturbances from Mining*, July 2015, page 26.

Alberta's MFSP uses an asset-to-liability approach that considers the resource value associated with an approved project as a financial asset that could be used to pay for mine clean up. This creates a vulnerability in the MFSP where Alberta will not have sufficient security for cleanup if the estimated assets were over-valued, or if the value of the asset suddenly drops. In 2015, the Auditor General of Alberta found that "There is a significant risk that asset values calculated by the department are overstated within the MFSP asset calculation, which could result in security amounts inconsistent with the MFSP objectives." This risk has grown as the world moves closer to the day when high carbon prices or a coal-free alternative method of steel manufacture permanently collapses the value of metallurgical coal. The MFSP is not designed for the increasingly realistic possibility that coal prices collapse and never rise again.

A good illustration of the amount of financial risk produced by the MFSP's asset-to-liability approach was provided at the hearing for the rejected Grassy Mountain Coal project. In year 10 of that project, the difference between the company's estimates clean-up costs and their security deposit was around \$48 million dollars.⁶ This was not the project proponent's fault, it was merely the normal operation of the MFSP.

The need to get the MFSP fixed before any mines are approved is illustrated by the problems experienced in the United States during the collapse of their thermal coal industry. Thermal Coal companies in the United States used strategies including spinning off underfunded subsidiaries with legal responsibility for the regulatory obligations of mines, strategic pre-bankruptcy conduct, and bankruptcy to avoid fulfilling the environmental obligations attached to their mines. The four largest coal companies in the United States escaped from a little over \$5 billion in environmental and health liabilities between 2012 and 2017.

This was not the result of lone bad actors, but the result of too-flexible regulation and clever use of bankruptcy law. This encouraged coal-mining companies to mine for longer and to construct larger mines because they knew they could escape their regulatory obligations towards the environment and mine workers. If the program for obtaining security for clean-up costs is deficient, mining companies will construct mines where total costs exceed total profits because the companies expect to never pay the costs.

Before Alberta considers any new coal mines anywhere, the mine financial security program needs to be replaced with a system that fits an era of climate change and does not encourage reckless coal mining development. Contrasting the 6-year delay in fixing the problems with the MFSP to the speed with which the 1976 coal policy was removed helps to explain the public's assessment that Alberta Energy and the AER have not been effectively protecting the public interest.

⁵ *Ibid*, at page 25

⁶ Response to Undertaking 14 www.iaaac-aeic.gc.ca/050/documents/p80101/136830E.pdf.

⁷ Joshua Macey & Jackson Salovaara, "Bankruptcy as Bailout: Coal Company Insolvency and the Erosion of Federal Law" (2019) 71:4 Stan L Rev 879, at 886-887 and 993.

Another auditor General report on environmental liabilities⁸ notes two fascinating things. First, legacy coal mines are causing sinkholes in Southern Alberta and the AER is having difficulty securing any funding to fix the problem.⁹ Second, within the AER regulatory staff have maintained a list of legacy and orphan sites that includes cost estimates based on experience with similar sites but finance staff at the AER were unaware of the list until the auditor general brought it to their attention. This raises another concern: are the estimates of remediation costs used in the MFSP the estimates from the experienced AER staff, or the estimates of the AER accountants uninformed by the AER's real estimates?

Response to questions on the MFSP

Existing coal mines in Alberta have elected to use a full-security approach, but are not required to do so under the MFSP. Why existing coal mines may have done so may relate to the age of their mines at the time the MFSP came into force. New coal mines currently have the option of relying on the asset-to-liability calculation system. It may be appropriate to split the coal mine security system off from the oilsands mine security system to better design the system to suit the concerns facing each industry.

It should also be noted that the MFSP's 'full security' option does not take full security for the complete eventual clean-up of the entire mine, but only the clean-up of the existing landscape damage. For example, the Vista Coal Mine had \$73 526 in security in 2017, \$3 883 933 in 2018, and \$7 000 000 in 2020. (I note that \$7 000 000 is also the base deposit for an export coal mine under the asset calculation approach.)

In relation to how Selenium management can be incorporated into a financial security system, I have no compelling answer. The types of bioreactor systems proposed for Alberta's coal mines have only a few years of operating history and so estimating the long-term management and maintenance costs of such an enormous underground system appears to involve a lot of guess work.

The Federal Coal Mine Effluent Regulations & Selenium Management

The *Coal Mining Effluent Regulations* have not been enacted. They are a proposed federal regulation under the *Fisheries Act*, <u>RSC 1985</u>, <u>c F-14</u> to control the release of deleterious substances into water, most notably selenium.

The process of creating the *Coal Mining Effluent Regulations* started with government holding consultations in 2017. Environment and Climate Change Canada initially planned to have the regulations <u>published in 2018</u>, but they have were delayed and have not yet been published in the Canada Gazette. It is not difficult to determine what happened – industry took issue with the

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⁸ Auditor General of Alberta, *Processes to Provide Information About Government's Environmental Liabilities*, June 2021, page 26. www.oaag.ab.ca/wp-contents/uploads/2021/06/oag-aep-aer-trans-env-liabilities-fs-june-2021-report.pdf

⁹ Ibid, page 22.

proposed regulations and Environment and Climate Change Canada has chosen not to finalize them until they reach a compromise with industry. Slides from coal industry meetings, lobbying registrations, and Coal Association of Canada board meeting minutes are pretty clear about their organized opposition to the new regulations. The April 2020 Board Meeting minutes of the Coal Association of Canada makes the point well:

Coal Mining Effluent Regulations: Environment and Climate Change Canada (ECCC) provided an update on effluent regulations in February, 2020 and the CAC/Guy Gilron of Borealis Environmental Consulting have collected feedback from all producers and developers. Final written submissions are being prepared and to be sent to ECCC in May. **Meetings have been held with all the coal producing provinces asking for letters advocating for the delay in the publishing of the regulations.** President will be meeting with ECCC ADM J. Moffet and CMER managers seeking a commitment for technical meetings between the CAC and a delay in gazetting the regulations due to COVID.... (emphasis added)

When the regulations come into force is important because of the phase-in rules for the regulations: the current plan is for mines that enter commercial operation within 3 years of the CMER to count as "existing mines" subject to higher release limits. For instance, an "existing mine" will be permitted to release double the selenium that a "new mine" will be permitted to (Grassy Mountain Hearing Transcript Vol 22, at 4759-60). Lobbyists for the coal industry have managed to get a lot of coalmines that clearly do not exist categorized as "existing mines" by delaying the finalization of the regulations for five years. Whatever their general feelings on red tape, Albertans might have appreciated a little more red tape protecting their water.

Relating to the *Coal Mining Effluent Regulations*, I recommend the committee request a rerelease of federal completed access to information request #A-2018-01943. Some excerpts from that release are attached with this submission. ATIP re-releases are free and are processed in a week or two. This release contains records from 2018 of coal lobbyists and coal company representatives objecting to the proposed Selenium control limits in the regulations on the grounds that the best available technology was unreliable, unproven, and unlikely to meet the proposed Selenium limit of 5 ug/L as a maximum authorized monthly mean concentration. In their submissions to this committee, I get the impression the coal industry has said Selenium is well-understand and can be responsibly managed – industry's resistance to the *Coal Mining Effluent Regulations* tells a very different story.

I also encourage the panel to check the 2020 Environmental Monitoring Committee report¹⁰ from the Elk Valley: (available at) they do not show a picture of a functional solution for Selenium. The 2017 report indicated the population of Westslope Cutthroat Trout was stable and potentially increasing in numbers – but then the population was seemingly extirpated by 2019.

The Joint Review Panel's rejection of the Selenium plan for Grassy Mountain should also be considered – the joint review panel was provided experts and professionals to assess the mine's Selenium management plan and found it inadequate and unconvincing.

¹⁰ https://www.teck.com/media/2020-EMC.pdf

I encourage this committee to treat submissions about selenium management from industry and industry lobbyists with great care. I believe internal government records show industry lobbyists have put a great deal of time and effort into resisting effective regulation for selenium, and often rely on a small stable of industry-friendly experts. I encourage the committee to make a statement against the biggest and most absurd change industry lobbyists have sought – the excessive grandfathering period that would allow mines built until 2024 to count as existing mines and be permitted to release double the selenium under the forthcoming regulations.

Third, I encourage the Committee to make use of FOIP requests and provide Albertans a clear picture of Alberta's regulatory regime.

FOIP requests can be used to provide Albertans the real story of how regulators operate. Albertans, as you have heard, do not trust Alberta Energy or the AER. I encourage you to file FOIP requests to obtain records that give a clear picture of how Alberta Energy made policy relating to coal.

The Coal Association of Canada submitted a 3-page 'regulatory roadmap' document to Alberta Energy and Alberta Environment and Parks on March 4, 2020. I encourage the committee to ask for a copy of that document – Alberta Energy has so far declined to release it to me through FOIP.

Thank you,

Drew Yewchuk